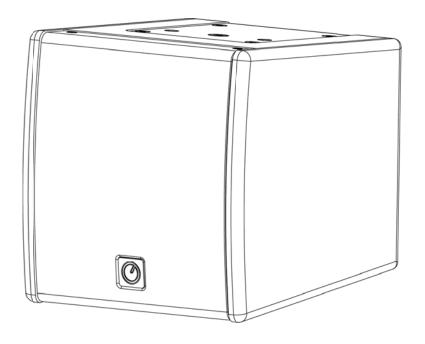
**USER MANUAL** | 4FW50T

# INTUSONIC



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INTUSONIC is a brand of Universal Technical Industries Co. Ltd.

Concept, Design & Distribution by **Adelto Industries Limited** Unit 4 Britannia Business Park Comet Way, Southend-on-Sea Essex SS2 6GE, United Kingdom www.adelto.com / sales@adelto.com

# **INTUCAB 4FW50T**

4" Passive Wideband Background Music Speaker

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#### Welcome

Thank you for choosing INTUSONIC for your sound system. To make sure that this product meets your expectations and provides long-term, reliable performance, please read and follow this instruction manual carefully.

# Manual language

- **UK** This user manual is written in English. For other languages, please use an auto-translation service of your choice.
- **FR** Ce guide est écrit en anglais. Pour les autres langues, veuillez utiliser un service de traduction automatique de votre choix.
- **DE** Diese Anleitung ist in Englisch verfasst. Für andere Sprachen verwenden Sie bitte einen automatischen Übersetzungsdienst Ihrer Wahl.
- **ES** Este manual está escrito en Inglés. Para otros idiomas, utilice un servicio de traducción automática de su elección.
- **PT** Este manual está escrito em Inglês. Para outros idiomas, use um serviço de tradução automática de sua escolha.
- **IT** Questo manuale è scritto in inglese. Per altre lingue, utilizza un servizio di traduzione automatica a tua scelta.

## Important safety instructions

- Read these instructions and all markings on the product. Keep these instructions.
- Heed all warnings and instructions, both in this manual and on the product.
- Clean only with a dry cloth. Unplug the unit or its power adaptor/charger from AC supply before cleaning.
- Do not use this product near water and avoid any exposure to water.
- Before connecting this product to any AC supply (if any), make sure to check whether the AC mains voltage and frequency match the indication on the product and its packaging.
- Only connect this product or its power adaptor/charger to an AC supply (if any) with sufficient power handling, protective earth connection, ground-fault (earth-fault) protection and overload protection.
- Disconnect the product or its power adaptor/charger from the AC supply (if any) during thunderstorms or longer periods of being unused.

# **EC Declaration of Conformity**

#### The manufacturer

Adelto Industries, Unit 4 Britannia Business Park, Comet Way, Southend-on-Sea, Essex, SS2 6GE, United Kingdom

Declares at his sole responsibility that the equipment

## **INTUSONIC 4FW50T**

is in conformity with the following directives/standards/regulations:

#### EMC Directive 2014/30/EU

EN55035:2017

LVD Directive 2014/35/EU

EN62368-1

ROHS2 Directive 2011/65/EU & 2015/863/EU

EN63000:2018

And is marked as follows:

Southend-on-Sea. 19<sup>th</sup> March 2021

Authorized Signature

- Make sure any heat sink or other cooling surface, or any air convection slot, is exposed sufficiently to free air circulation and is not blocked.
- Do not operate this product in environmental temperatures exceeding 35 degrees Celsius and/or 85% relative humidity.
- Position the product in a safe and stable place for operation, out of reach of unauthorized persons.
- Make sure any cable connections to and from the product are neither subject to potentially destructive mechanical impact nor present any risk of stumbling or other accident risk to people.
- Audio equipment may generate sound pressure levels sufficient to cause permanent hearing damage to persons. Always start up at low volume settings and avoid prolonged exposure to sound pressure levels exceeding 90dB.
- Do not open this product for service purposes. There are no userserviceable parts inside.
- Warranty will be void in any case of unauthorized service by the user or other not authorized persons.
- Take any precaution required by local law, applicable regulations or good business practice to avoid injury of people or material damage by use of this product.

# Symbols used in this manual

- DANGER! Safety hazard. Risk of injury or death.
- ATTENTION! Read manual before installation and operation.
- WARNING! Hazardous voltage. Risk of severe or fatal electric shock.
- WARNING! Fire hazard.

# Health Advice

This unit may produce and absorb electromagnetic radiation. The strength of radiation and the sensitivity for disturbing interference matches the CE and FCC requirements. A corresponding sign is printed on the backside of the unit. Any change or modification may affect the behavior of the unit concerning electromagnetic radiation, with the CE and FCC requirements eventually not to be met any more. The manufacturer takes no responsibility in this case.

## Functional Advice (only for powered products)

This unit is immune to the presence of electromagnetic disturbances – both conducted and radiated - up to a certain level. Under peak conditions, the unit is classified to show a "class C" performance criteria and may encounter temporary degradation or loss of function which may need manual help to recover. In such case, switch the unit off and back on to recover.

# Environmental Advice

This unit is built to conform to the ROHS-2 standard according to directive 2011/65/EU and the WEEE directive 2012/19/EU of the European Parliament and of the Council of the European Union. Under these regulations, the product shall not be discarded into regular garbage at the end of its life, but shall be returned to authorized recycling stations.



#### Battery Advice (only for battery-powered products)

- Some products may contain a battery. Refer to the further chapters of this manual to determine whether this product contains a battery, and whether this is removable and/or rechargeable.
- Where applicable, adhere to the relative regulations in aviation transport.
- If the battery is rechargeable, the battery might not be fully charged or partly discharged at the time of purchase. Recharge before use. Only use recommended or included chargers with appropriate voltage/current rating.



WARNING! Fire hazard. Batteries might heat up during charging. Only charge in a place with sufficient air convection.

#### Wireless Advice

- Some products may contain a wireless transmitter, receiver or transceiver. Refer to the further chapters of this manual to determine whether this product contains a wireless function, and in which frequency this operates.
- Make sure the frequency of operation does not require a specific license in the territory you operate the product in. If it does, obtain such license prior to any operation.
- Certain wireless technologies are designed for short distance operation. The actual distance will depend on how jammed the

## **Technical Data**

Frequency response (-3dB)	100Hz-15kHz
Sensitivity (1W/1m)/Max SPL	
Impedance	16 Ω
Power handling	20W (AES)
Drivers / Design	4" wideband full-range
Material	12mm MDF/PLW
Surface	paint
IP Rating	
Dimensions WxDxH	130x160x138mm
Weight	1.95 kg

### Warranty

This product is guaranteed to be free of defects in material and workmanship at the time of purchase. Send-in warranty repair is granted for a period determined by

- A period of at least 6 months (from the date pf purchase), or the minimum period required by law in the territory of sale, whichever is longer.
- A period of no longer (from the date of purchase) than the specified average lifetime of a component by the component's manufacturer.

frequency band is at the location of use. In adverse cases, operational distances might be as low as 5m. In normal circumstances, 10m can be assumed. Test the operational distance prior to relying on the wireless functionality in a specific application.

# Unpacking

Please check that the box contains the following items:

- 1 pc. main unit
- 1 pc. plug-in terminal block 2-pole P=5.08mm
- 3 pcs. M6 safety lug
- 1 pc. M10 to M6 thread adaptor
- 1 pc. instruction manual

If any part is missing, please contact your dealer immediately for replacement.

# About this product

The 4FW50T is a multi-purpose passive wideband low-impedance loudspeaker system for commercial applications. Due to its extremely compact size owed to the 4" chassis, it fits perfectly into almost all background music systems, and provides more solid and predictable performance than e.g. ceiling speakers do. This makes it a perfect choice for multi-purpose venues, where unobtrusive appearance has to be paired with good acoustic performance. By means of its extremely flexible mounting options, it can be:

- Flown by the use of the M6 lug mounting points;
- Wall or ceiling mounted with an optionally available suspension bracket;
- Be directly attached to trussing or other tubes via a coupler attached to its M10 lug mounting point.

The 4FW50T can further be retrofitted with a 100V line transformer kit (Ref. UTK20) for the use in 100V line systems.

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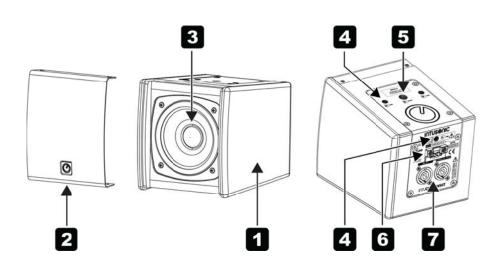
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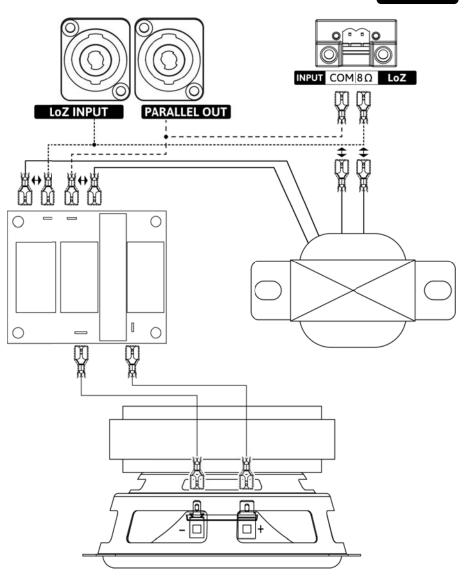
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# Structural Design



- Wooden Cabinet. This is the main body of the speaker. Due to the wooden base material, this speaker is only suitable for indoor use. Grille. This metal mesh grille protects the driver from mechanical impact and also from dust by the inner foam layer.
- Wideband Driver. This is 4" / 16 Ohm full range loudspeaker.
- **M6 mounting point (x3).** This is a rear-welded closed M6 thread insert, which can be used for both lug mounting and Coupler mounting. Make sure the inserted screw is longer than 8mm and shorter than 11mm.
- **M10 mounting point.** This is a rear-welded closed M10 thread insert, which can be used for both lug mounting and Coupler mounting. Make sure the inserted screw is longer than 10mm and shorted than 16mm.
- **6 Terminal Strip connector.** This is a 2-pin terminal strip connector allowing to establish a screw/plug connection via the included connector. Be aware that this is a 5.08mm pin distance connector, do not use 5mm plugs.
- **7** Speakon<sup>™</sup>-Compatible input connectors. These are two connectors cabled in parallel.





**Note:** When the transformer is installed the two parallel Speakon<sup>™</sup>- compatible connectors will be disabled, and low impedance operation via the 5.08mm terminal strip is disabled as well.

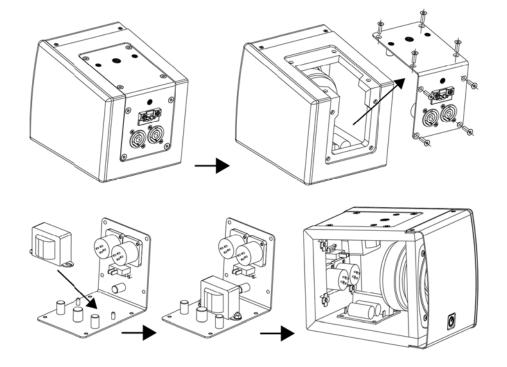
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To begin the transformer installation, remove the L-shaped back panel as shown below. All cables from the back panel to the internal crossover PCBA shall be removed.

Mount the transformer bracket and the transformer itself via the accessories included in the UTK20 transformer kit as shown. Fix all internal screws with screwlock glue.

Rewire the connection from the 5.08mm terminal strip to the transformer input and from the transformer output to the internal crossover as shown in the cabling plan. Refit the rear panel to the main speaker body.



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**DANGER!** Using the M6 and M10 mounting points, it is important that the screw thread length inserted into the mounting points is as close as possible but not exceeding the stated insertion length. Threads too short pose the danger of insufficient grip; threads too long will impose torsion forces on the mounting point's welding lines. Both may lead to the screw connection becoming loose. It is the installers/users responsibility to make sure the correct screw thread length is adhered to.

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# Installation

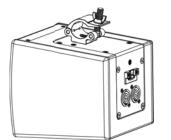
# **BRACKET** mounting (top).

Note: The optional (not included) SUSP-M6 bracket is required for this mounting way:

- Insert the M10-to-M6 thread adaptor into the M10 thread insert until it is slightly below the level of the panel.
- Turn up the counter-screw plate of the bracket to expose the full thread stub length of the bracket.
- Screw the bracket's thread stub into the M10-converted-to-M6 thread insert as far as possible.
- Adjust the position of the speaker body vs. the bracket.
- Tighten the counter screw plate to lock the bracket vs. the speaker.
- Turn the bracket as required for ceilingor wall-mounting.

## FLOWN mounting

- Attach M6 screw lugs to the two top mounting points and the rear mounting point.
- Use fail-safe hanging cables to suspend the speaker from the ceiling or other structures.



#### COUPLER mounting (top)

- Attach an M10 truss coupler to the M10 mounting point and affix to truss.
- Insert an M6 lug into the rear mounting point and use a certified safety cable attached to the lug if required by law.

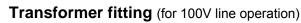
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Danger - risk of injury: Flown (hanging) installation requires extensive experience, like calculating working load limits, knowledge of installation materials, and periodic safety inspection of all installation material and the flown product. If you lack such qualifications, do not attempt the installation yourself. Improper installation can result in injury of people.

Make sure to adhere to following rules:

- The product shall be installed out of reach of people and outside of areas where persons may walk by or be seated.
- The installation area shall be able to hold a minimum point load of 10 times the product's weight.
- The installation is secured with an appropriate safety cable where necessary or required by law. The installer and user are obliged to survey applicable local safety regulations prior to installation and operation. Always use a certified safety cable according to DIN56927 that can hold 12 times the weight of the device when installing the unit. This secondary safety attachment should be installed in a way that no part of the installation can drop more than 20cm if the main attachment fails.
- The installation place is free from unwanted persons during installation. de-installation or servicing.
- The safety-relating and machine-technical installations are approved by an expert before using them for the first time.
- The cooling requirements are met (if any). Note that warm air is ascending, making the area below a rooms' ceiling potentially warmer than lower locations.



The 4FW50T can be fitted with an additional optional line transformer for 100V line operation. The transformer, including a suitable cabling kit, can be obtained as an accessory (item code UTK20)



Danger: Fitting the line transformer requires internal recabling. Only L expedite this work if you hold applicable qualifications and certificates. Work on 100V line systems can be hazardous due to the voltages involved.